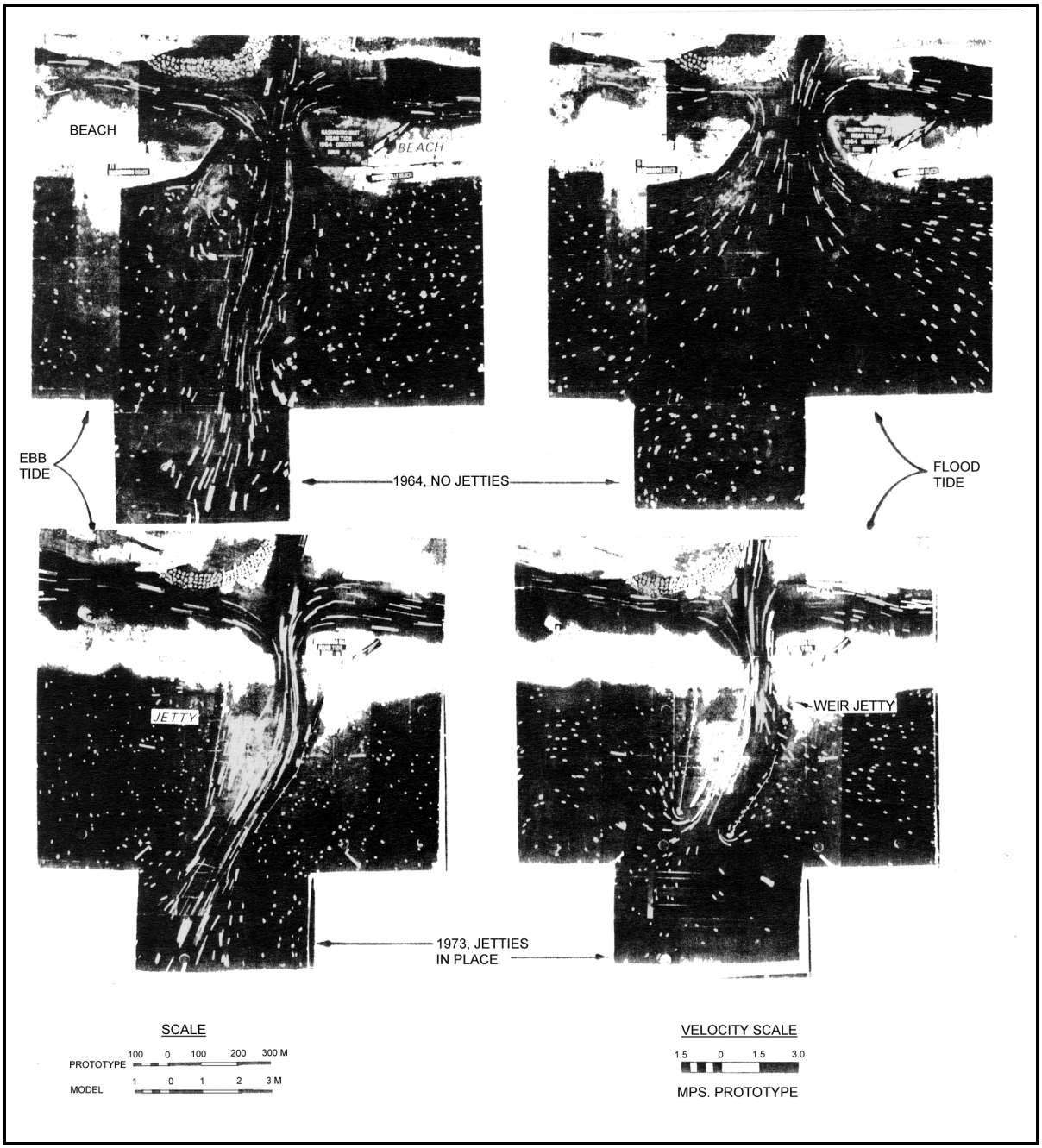

Figure II-6-12. Ebb and flood flow patterns from a model study of Masonboro Inlet, North Carolina (Seabergh 1975)

(4) A more precise method of prism determination includes the cubature method (Jarrett 1976), which takes into account the time required for a tide to propagate through a bay and segments the bay into subareas rather than assuming a uniform rise and fall of the bay tide. Jarrett (1976) also recommends ways to relate point measurements of maximum velocity in the center of the channel (as can be obtained from NOS current tables) to velocities representative of the entire inlet, using

$$\frac{V_{avg}}{V_{meas}} = \left(\frac{R}{D}\right)^{\frac{2}{3}} \tag{II-6-15}$$